West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-07300003-2013**
Application Received: **April 16, 2012**
Plant Identification Number: **07300003**
Permittee: **CYTEC Industries Inc.**
Facility Name: **Willow Island Plant**
Manufacturing Unit: **Urethanes (Part 1 of 4)**
Mailing Address: **#1 Heilman Avenue, Willow Island, WV 26134**

Physical Location:	Willow Island, Pleasants County, West Virginia
UTM Coordinates:	474.00 km Easting • 4,356.00 km Northing • Zone 17
Directions:	From Interstate 77, Exit 179, take State Route 2, north approximately 10 miles. Plant site on left (river side) of State Route 2, two miles south of Belmont, WV.

Facility Description

CYTEC Industries Inc. is a global, research-based specialty chemical company that is covered by NAICS 325998 and SIC 2899. The company operates a multi-product, multi-process chemical plant at Willow Island, WV. Plant operations are divided into the following three manufacturing units and one support services unit: Urethanes (Part 1 of 4), Surfactants (Part 2 of 4), Site Services (Part 3 of 4) and Polymer Additives (Part 4 of 4).

The Urethanes unit (Part 1 of 4) manufactures aliphatic isocyanates for use in industrial coatings, adhesives, textiles and elastomers. The automotive industry is a major user of these products.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	**Potential Emissions**	**2011 Actual Emissions**
Carbon Monoxide (CO)	80.75	31.14
Nitrogen Oxides (NO_X)	92.52	20.43
Particulate Matter ($PM_{2.5}$)	18.34	0.37
Particulate Matter (PM_{10})	18.34	0.37
Total Particulate Matter (TSP)	22.65	4.13
Sulfur Dioxide (SO_2)	42.15	0.27
Volatile Organic Compounds (VOC)	285.51	95.48
PM_{10} is a component of TSP.		
Hazardous Air Pollutants	**Potential Emissions**	**2011 Actual Emissions**
Acetonitrile	0.30	0.17
Acrylic Acid	0.20	0.094
Benzene	0.25	0.0019
Bis (Chloromethyl) Ether	<0.01	Not reported
Chloroform	0.03	0.012
Dimethyl Formamide	2.92	1.533
Ethylbenzene	0.13	0.056
Formaldehyde	0.48	0.066
Hexane	1.91	0.621
Hydrochloric acid	0.03	0.0092
Hydroquinone	≤0.01	Not reported
Maleic Anhydride	0.18	0.067
Methanol	57.87	34.286
Methylene chloride	0.10	0.08
Methyl isobutyl ketone	61.26	11.336
2,4 Toluene Diisocyanate	<0.01	0.0002
Toluene	66.37	20.179
Triethylamine	20.43	1.927
Xylenes (isomers and mixtures)	0.39	0.223
Total HAPs	212.84	70.67

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 285 TPY of Volatile Organic Compounds (VOC), 57 TPY of Methanol, 61TPY of Methyl Isobutyl Ketone, 66 TPY of Toluene, and 20 TPY of Triethylamine. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Cytec Industries Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate matter and opacity limits for indirect heat exchangers.
	45CSR6	Open burning prohibited.
	45CSR7	Particulate matter and opacity limits for manufacturing sources.
	45CSR10	Sulfur dioxide limits.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for minor sources.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63.
	40 C.F.R. Part 61 Subpart M	Asbestos inspection and removal
	40 C.F.R. 63 Subpart EEEE	Organic liquids distribution (OLD) MACT.
	40 C.F.R. 63 Subpart FFFF	Miscellaneous Organic Chemical Manufacturing (MON) MACT.
	40 C.F.R. 63 Subpart DDDDD	Boiler and Process Heater MACT
	40 C.F.R. 68	Risk Management Plans
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-2473I	February 5, 2013	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The following changes to the October 23, 2007 Title V Permit were to incorporate permits R13-2473G, R13-2473H, and R13-2473I; processed as R30-07300003-2007(MM01), R30-07300003-2007(MM02), and R30-07300003-2007(MM03). R30-07300003-2007(SM01) incorporated the requirements of 40 C.F.R 63, subpart FFFF.

These changes are summarized as follows:

1. R13-2473G issued on February 6, 2008 incorporated a new process for recovering spent dimethyl formamide solvent and the installation of 3 new wastewater tanks to comply with the MON MACT requirements.

2. R13-2473H issued on November 1, 2010 reflects the replacement of two new vacuum pumps P590A and P590B and the removal of emission points MEC-001 and UCM-004 pertaining to the old equipment.

3. R30-07300003-2007 (Part 1 of 4) MM01 was issued on April 1, 2008 and incorporated the changes permitted by R13-2473G discussed above.

4. R30-07300003-2007 (Part 1 of 4) SM01 was issued on January 26, 2009 in order to incorporate the requirements of 40 C.F.R. 63 Subpart FFFF (MON MACT).

5. R30-07300003-2007 (Part 1 of 4) MM02 was issued on January 25, 2011 and incorporated changes resulting from the issuance of R13-2473H on November 1, 2010. In addition to the minor source NSR permit changes referenced above, this minor modification incorporated the addition of Federal and State GHG reporting requirements as conditions 3.4.7, 3.5.10, and 3.5.11. An explanation was added to the 3.7.2 non-applicability section which elaborates on the inclusion of 40CFR63, subpart F, G, and H for MON MACT applicability only under 40 C.F.R. 63, subpart FFFF. Lastly, was the addition of a reference to 40CFR63, subpart H in condition 4.4.10 recordkeeping for the MON MACT.

6. R13-2473I was issued on February 5, 2013 and incorporated changes which significantly affected the formatting of the new rule 13 permit and thus Section 4.0 of the Title V renewal. The most significant was the removal of numerous control equipment monitoring parameter limitations from section 4.1. These monitoring parameter limits were consolidated in a new requirement 4.1.7 which references the same limitations, but in a new Appendix B Table.

In general, the format of R13-2473I was changed to mirror 45CSR13 permit number R13-2156Q in an effort to increase operational flexibility. The specific changes are enumerated and discussed below within the Specific Title V changes and justifications table.

As discussed within the 45CSR13 evaluation, the following equipment changes were made:

New Equipment	E107 Water Cooled Oil Cooler (does not vent), E540 Methanol Secondary Condenser (emission point MEC-009) and U002 Drumming Station (emission point MEC-013)
Replacement	New Rental Equipment H027 Chilled Oil Refrigeration System (does not vent) replaces existing H027 Chilled Oil Refrigeration System.
Removal	E006 Cooling Oil Air Cooler, E100 Catalyst Recovery Vent Condenser, E108 Water Cooled Oil Cooler, V070A/B Bottoms Boxes, and V120/V220 Catalyst Decanters

In addition, some very small emission increases were noted for the new U002 drumming station (emission point MEC-013) at 0.7 lb/hr VOC, including methanol. Also small increases to the existing annual emission limits were approved for MEC-006 and UTM-002 when the Methyl Carbamate process is on line. This now allows the MEC-006 emission point to emit a total of 0.3 tpy VOC and the UTM-002 emission point to emit 0.1 tpy VOC. These Appendix A changes are highlighted along with some other corrections approved under minor NSR permit R13-2473I in Attachment 1 to this FactSheet below.

7. R30-07300003-2007(Part 1 of 4) MM03 was submitted on December 3, 2012 to incorporate the changes from R13-2473I. These changes will be processed as part of this Title V renewal.

40 C.F.R. Part 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

The permittee operates a 21 MM Btu/hr natural gas fired process heater (H530) which is subject to the work practice standards defined within §63.7500(a)(1) and thus Table 3. These work practice standards consist of an annual tune up in accordance with §63.7540(a)(10) and a onetime energy assessment. The compliance date for existing sources is listed as January 31, 2016 as specified in §63.7495(b). The 40 C.F.R. 63 Subpart DDDDD requirements were included as condition 4.1.23.

40 C.F.R. Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Misc. Organic NESHAP

As defined within the October 3, 2008 Notification of Compliance Status (NOCS) report, Cytec has defined under Miscellaneous Chemical Process Unit (MCPU) 15, a "Group 1" methanol storage tank, ID V516. This vent demonstrated compliance by utilizing the vapor balancing alternative of 40 C.F.R. §63.2470(e) and thus complying with 40 C.F.R. §63.1253(f), which requires the tank to utilize pressure relief devices that are set to no less than 2.5 psig at all times to prevent breathing losses.

As defined within the October 3, 2008 Notification of Compliance Status (NOCS) report, Cytec has defined under Miscellaneous Chemical Process Unit (MCPU) 15 – MeC, a "Group 1" continuous process vent originating from the C539 methanol column. This vent demonstrated

compliance by utilizing a flare control device having the ID of H599. The flare underwent waste gas testing on May 4, 2006 to successfully demonstrate compliance with the flare requirements of 40 C.F.R. §63.11(b).

Specific Title V changes and justifications

The table below was designed to promote transparency in an effort to track the changes being proposed within this Title V renewal permit.

Existing Title V[1] Condition Number	Renewal[2] Condition Number	Justification and Reasoning for Change.
4.1.1	4.1.1	Emission Limit Table moved and referenced as Appendix A, in accordance with R13-2473I
4.1.2	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.3	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.4	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.5	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.6	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.7	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.8	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.9	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.11	4.1.7	All control equipment monitoring and operating limitations were consolidated into Appendix B and referenced by 4.1.7, in accordance with R13-2473I
4.1.10	4.1.10 reserved	The R13-2473I permit modification eliminated the H599 flare pilot light requirements because this source is now also subject to the MON MACT control requirements listed in 4.1.9, which provides duplicate coverage. As a result of the Rule 13 permit reserving the 4.1.10 position, it was also reserved within the Title V permit in order to promote consistency with the numbering scheme employed by the minor source NSR permit.
4.1.12	4.1.11	Relocation of the same 45CSR7 opacity requirement to correlate with R13-2473I numbering.

Existing Title V[1] Condition Number	Renewal[2] Condition Number	Justification and Reasoning for Change.
New	4.1.12	Added additional opacity allowance under 45CSR7 in accordance with new R13-2473I requirement
4.1.14	4.1.14	Same requirement but added mineral acid concentration limit table in accordance with R13-2473I
4.1.15	4.1.18	Relocation of 45CSR6 PM limit for H599 flare in accordance with R13-2473I
4.1.16	4.1.19	Relocation of 45CSR6 opacity limit for H599 flare in accordance with R13-2473I
4.1.17	4.1.20	Relocation of 45CSR2 opacity requirements for H530 process heater in accordance with R13-2473I numbering
4.1.18	4.1.21	Relocation of 45CSR2 PM limitations for H530 in accordance with R13-2473I numbering
4.1.19	4.1.22	Relocation of 45CSR10 SO2 limitation for H530 in accordance with R13-2473I numbering
4.1.20	4.1.9	Relocation of 45CSR34, 40CFR63, subpart FFFF "MON" requirements in accordance with R13-2473I numbering
4.5.1	4.1.2	Relocated HAP usage reporting requirements in accordance with R13-2473I numbering
4.4.1	4.1.3	Relocation of demonstration calculation to show compliance with 4.1.1 emission limitations in accordance with R13-2473I numbering
3.1.11	4.1.4	Relocation of operation and maintenance of air pollution control equipment requirements in accordance with R13-2473I numbering
New	4.1.5	Air pollution control device bypass for maintenance allowance added in accordance with R13-2473I
New	4.1.6	45CSR7 applicability table added in accordance with R13-2473I
New	4.1.7	New consolidated Appendix B monitoring limitation/requirements in accordance with R13-2473I
New	4.1.8	Recognizes 45CSR34, 40CFR63, subpart EEEE "OLD" applicability in accordance with R13-2473I
4.1.20	4.1.9	Recognizes 45CSR34, 40CFR63, subpart FFFF "MON" applicability in accordance with R13-2473I and establishes site specific requirements new to this renewal permit
New	4.1.15	Recognizes 45CSR§7-9.1 allowance for unavoidable malfunctioning of equipment in accordance with R13-2473I

Existing Title V[1] Condition Number	Renewal[2] Condition Number	Justification and Reasoning for Change.
3.1.12	4.1.16	Relocation of 45CSR§7-10.3 maintenance exemption allowance to coincide with R13-2473I organizational outline. Since the Urethanes Unit encompasses all the equipment covered by this (1 of 4) title V permit there was no need to leave it within the facility wide requirement section.
New	4.1.17	New R13-2473I requirement 4.1.17 in order to mirror Cytec's model permit and provide inclusion of intermittent use equipment that may be taken off line for extended periods of time and used on an as-needed basis.
New	4.1.23	Inclusion of Boiler MACT requirements for oil heater H530
3.1.13	3.1.11	Renumbered due to moving conditions 3.1.12 and 3.1.11 back to section 4.0 in accordance with R13-2473I
New	4.2.1	Specifies Appendix B control equipment monitoring in accordance with R13-2473I
4.2.1	4.2.2	45CSR7 Opacity monitoring in accordance with R13-2473I
4.2.1	4.2.4	Preserved old 45CSR6 opacity monitoring for the H599 flare in new requirement. This condition was also enhanced to now include Method 9 quantification of opacity instead of the Method 7A as previously referenced when the Rule 7 and Rule 6 monitoring requirements were combined
New	4.2.4	45CSR2 Opacity requirements were also added to this monitoring condition for the H530 fuel burning process heater
New	4.2.3	Bypass Monitoring incorporated in accordance with R13-2473I
4.2.2	4.2.5	"MON" MACT site specific monitoring conditions added as part of the Title V renewal.
3.4.4	4.4.10	Relocation of 45CSR34, 40CFR63, subpart EEEE "OLD" MACT recordkeeping requirement to correspond with R13-2473I numbering.
3.4.5	3.4.4	Renumbered same requirement due to relocating 3.4.4
3.4.6	3.4.5	Renumbered same requirement due to relocating 3.4.4
4.4.4	4.4.6	Same basic records, but with enhancements according to R13-2473I
4.4.5	4.4.4	Same basic records, but with enhancements according to R13-2473I
4.4.6	4.4.5	Same basic records, but with enhancements according to R13-2473I
4.4.7	Deleted	Records for E120 condenser monitoring is already included in 4.4.6
4.4.8	4.4.1	Relocation of operating schedule requirements for H530 in accordance with 45CSR2

Existing Title V[1] Condition Number	Renewal[2] Condition Number	Justification and Reasoning for Change.
4.4.9	4.4.7 & 4.4.9	4.4.7 splits out 45CSR7 VE records from 4.2.2 monitoring and 4.4.9 splits out 45CSR6 and 45CSR2 VE records from 4.2.4 monitoring
4.4.10	4.4.11	Relocation of 45CSR34, 40CFR63 "MON" MACT recordkeeping requirement with added site specific conditions
4.5.2.	4.5.1	Relocation of 45CSR34, 40CFR63 "MON" MACT reporting requirement with added site specific conditions

[1] R30-07300003-2007(MM02) Last permit prior to renewal

[2] R30-07300003-2013 Draft/Proposed Renewal Permit

In addition to the changes discussed above some minor changes were added to sections 2.0 and 3.0 in order to update the facility's Title V general and facility wide requirements with the most current boilerplate language. These changes are listed in order as follow:

Condition 2.1.4 was modified by adding the word "monthly" in order to more completely describe "data"

Condition 3.1.1 was modified by omitting the text, "firm, corporation, association or public agency"

Condition 3.1.2 was modified by adding the word, "or," and deleting the words "suffer, .. or permit"

Condition 3.1.3 had the citation modified by removing the old citation for 45CSR15 and replacing it with the new state rule which now encompasses all NESHAPs (40CFR63 and 40CFR61), 45CSR34.

Condition 3.3.1 was modified by adding a condition (d)

Condition 3.4.2 was updated to reflect multiple revisions to the "Retention of records" language

Condition 3.4.7 was deleted to remove the GHG reporting requirements which are not defined as applicable requirements under 40 CFR§70.2.

Condition 3.5.3 was updated to add introductory text pertaining to electronic submittals and updated EPAs mailing address

Condition 3.5.5 was updated to provide the current language from EPA pertaining to electronic submittal of annual certification reports.

Condition 3.5.8 was updated by deleting subsection "c"

Condition 3.5.10 was deleted along with 3.5.11 to remove the GHG reporting requirements which are not defined as applicable requirements under 40 CFR§70.2.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR17	To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter. Per 45CSR§17-6.1, the Urethanes manufacturing unit is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.
40 C.F.R. 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. There are no petroleum liquid storage tanks in the Urethanes manufacturing unit.
40 C.F.R. 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984." There are no petroleum liquid storage tanks in the Urethanes manufacturing unit.
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tank size or vapor pressures of the stored chemicals are below the applicability thresholds of 40 C.F.R. part 60 Subpart Kb.
40 C.F.R. 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. The Urethanes manufacturing unit does not produce as intermediates or final products any of the materials listed in 40 C.F.R. § 60.489.
40 C.F.R. 60 Subpart DDD	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry. The Urethaness manufacturing unit does not manufacture polypropylene, polyethylene, polystyrene, or polyethylene terephthalate for which this rule applies.
40 C.F.R. 60 Subpart III	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.617 as a product, co-product, by-product, or intermediate.
40 C.F.R. 60 Subpart NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.667 as a product, co-product, by-product, or intermediate.
40 C.F.R. 60 Subpart RRR	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.707 as a product, co-product, by-product, or intermediate.
40 C.F.R. 63 Subpart F **40 C.F.R. 63 Subpart G** **40 C.F.R. 63 Subpart H**	National Emission standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (HON)." 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§ 63.100 (b) (1), (b) (2), and (b) (3).

40 C.F.R. Part 63 Subpart DD	National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations. The Urethanes manufacturing unit does not receive off-site materials as specified in paragraph 40 C.F.R. § 63.680 (b) and the operations are not one of the waste management operations or recovery operations as specified in 40 C.F.R. §§ 63.680 (a) (2) (i) through (a) (2) (vi).
40 C.F.R. Part 63 Subpart JJJ	National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins. The Urethanes manufacturing unit does not produce the materials listed in 40 C.F.R. § 63.1310.
40 C.F.R. Part 63 Subpart PPPP	National Emission standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products. The Urethanes manufacturing unit does not produce an intermediate or final product that meets the definition of "surface coated" plastic part.
40 C.F.R. Part 63 Subpart WWWW	National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production. The Urethanes manufacturing unit does not engage in reinforced plastics composites production as defined in 40 C.F.R. § 63.5785 and does not manufacture composite material as defined in 40 C.F.R. § 63.5935.
40 C.F.R. Part 64	The Urethanes Unit does not have any pollutant specific emissions units (PSEU) at this facility that satisfy all of the applicability criteria requirements of 40 CFR § 64.2 (a), i.e., that: 1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the "major" threshold limits to be classified as a major source; 2) are subject to an emission limitation or standard and; 3) have a control device to achieve compliance with such emission limitation or standard. Therefore, the Urethanes Unit is not subject to the Compliance Assurance Monitoring (CAM) rule.

Additionally, with respect to greenhouse gas requirements they were determined not to be applicable at this time because the facility has not made any changes that would trigger a PSD permit modification.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: February 27, 2013
Ending Date: March 29, 2013

All written comments should be addressed to the following individual and office:

Jesse Hanshaw, P.E.
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Jesse Hanshaw
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1216 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Pending

Attachment 1. Changes to Appendix A approved under R13-2473I

Emission Point	Emission Unit ID	Pollutant	Emission Limit	
			LB/hr	TPY
Emission Limits when any Urethanes Manufacturing Unit Process is On-Line				
USM-007	V002	VOC	1.0	0.1
USM-008	V320	VOC	0.1	0.1
USM-010	V132	VOC	0.1	0.3
MEC-003	U001 Note: relocated to more appropriately reflect usage	VOC	0.1	0.1
MEC-013	U002 Note: new equipment	VOC THAP	0.7 0.4	0.1 0.1
MEC-011	H530 Process Heater	CO	1.8	7.9
		NO_X	2.2	9.4
		PM	0.2	0.9
		SO_2	0.1	0.1
		VOC	0.2	0.7
Emission Limits when TMI to TMU Process is On-Line				
TMI-002	V085A	VOC	0.1	0.10
		THAP	0.1	0.10
TMI-003	V060A	VOC	0.4	0.20
		THAP	0.3	0.15
TMI-005	V060B	VOC	0.4	0.20
		THAP	0.3	0.15
UAM-001 *or* UAM-002	C102	VOC	2.0	0.90
		THAP	1.8	0.75
Emission Limits when Methanol Recovery Operation is On-Line				
MEC-006	V582, V574, V500A-C	VOC	0.70	0.50
		THAP	0.70	0.50
MEC-007	V578, V535	VOC	0.39	0.30
		THAP	0.39	0.30
MEC-008	P590A/B	VOC	0.10	0.10
		THAP	0.10	0.10
UTM-002	V545	VOC	0.30	0.30
		THAP	0.30	0.20

Emission Point	Emission Unit ID	Pollutant	Emission Limit	
			LB/hr	TPY
Emission Limits when DMF Recovery Operation is On-Line				
UAM-002	V555, V560, P051A/B, J001/J101	VOC	0.1	0.1
		THAP	0.1	0.1
UAM-003	V024	VOC	0.1	0.1
		THAP	0.1	0.1
UAM-007	V550	VOC	0.4	0.1
		THAP	0.4	0.1
UAM-001	V010	VOC	0.1	0.1
		THAP	0.1	0.1
Emission Limits when TMI Distillation Process is On-Line				
~~MEC-003~~	~~U001~~	~~VOC~~	~~0.1~~	~~0.10~~
UAM-001 *or* UAM-002	P051A/B, C102/E120	VOC	0.3	0.20
		THAP	0.2	0.10
USM-006	V020	VOC	0.1	0.10
UTM-002	V130	VOC	0.1	0.10
Emission Limits when TMXDI and Crude TMI Production Process is On-Line				
DIP-001	V003	VOC	0.1	0.1
~~MEC-003~~	~~U001~~	~~VOC~~	~~0.1~~	~~0.1~~
MEC-006	V510, V582	VOC	0.2	0.1
		THAP	0.2	0.1
MEC-010	V583	VOC	0.1	0.4
		THAP	0.1	0.2
TMX-003	V102	PM	0.1	0.1
~~TMX-004~~	~~V107~~	~~PM~~ Found to be H2SO4 not PM	~~0.1~~	~~0.1~~
UAM-001	C102/E120	VOC	1.75	5.6
		THAP	1.75	5.6
UAM-002	P051A/B	VOC	0.6	1.9
		THAP	0.2	0.65
UAM-003	K360	VOC	0.1	0.1
		THAP	0.1	0.1
UAM-004	V006	VOC	0.2	0.1
~~UAM-005~~	~~V105~~	~~PM~~ Found to be H2SO4 not PM	~~0.1~~	~~0.1~~
UAM-006	V038	VOC	0.3	0.8
		THAP	0.1	0.1
UAM-007	V007	VOC	0.6	2.0
		THAP	0.6	2.0
UAM-008	V401	VOC	0.1	0.1
		THAP	0.1	0.1

Emission Point	Emission Unit ID	Pollutant	Emission Limit	
			LB/hr	TPY
UCM-005	V080B	VOC	0.1	0.1
UCM-006	V070A/B	VOC	0.1	0.1
UCM-007	V121A-C	VOC	0.2	0.4
USM-003	V101	VOC	0.1	0.1
USM-004	V201	VOC	0.1	0.1
USM-005	V301	VOC	0.1	0.1
USM-011	V031	VOC	0.1	0.1
UTM-002	V100	VOC	0.1	0.1
Emission Limits when Methyl Carbamates Process is On-Line				
MEC-002	E522, V508	VOC	1.5	0.52
		THAP	0.8	0.51
MEC-003	M507	PM	1.2	0.47
MEC-004	V514	VOC	0.1	0.01
MEC-005	V554	VOC	0.1	0.01
MEC-006	V599A-E, V574	VOC	0.1	~~0.25~~ 0.30
		THAP	0.1	~~0.1~~ 0.15
MEC-007	V578, V535	VOC	1.8	2.2
		THAP	1.76	2.1
MEC-008	P590A/B, V577	VOC	0.6	2.00
		THAP	0.6	2.00
MEC-009	H599, C539, E540 Note: added as secondary condenser	CO	0.1	0.02
		NO_X	0.4	1.15
		PM	0.1	0.01
		SO_2	0.1	0.01
		VOC	7.2	25.12
		THAP	6.1	21.30
MEC-010	V584	VOC	0.1	0.10
		THAP	0.1	0.10
MEC-012	V515	VOC	0.2	0.7
		THAP	0.2	0.7
UTM-002	V001	VOC	0.2	~~0.03~~ 0.10
		THAP	0.1	~~0.02~~ 0.10